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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,557	06/19/2006	Kenichi Motoyama	292358US0PCT	9829
22850	7590	01/14/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
LOEWE, ROBERT S				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
01/14/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/583,557

Applicant(s)

MOTOYAMA ET AL.

Examiner

ROBERT LOEWE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The Examiner would like to point out that the application number shown by Applicant's response on 12/22/08 should be 10/583,557, not 11/583,557.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/08 has been entered.

Response to Arguments

Applicant's arguments filed 12/22/08 have been fully considered but they are not persuasive.

Applicants argue that their working examples demonstrate the superior results which are obtained when employing the ureidoalkoxysilanes according to their invention. However, while the working examples and comparative examples do show differences in the abrasion resistance, there are no working examples which **directly** show the non-equivalency between aminopropyltrimethoxysilane as employed by Nogami et al. and ureidopropyltriethoxysilane as employed in the instant invention. The Examiner suggests repeating example 3 of Nogami et al. with the **only** difference being the substitution of the aminopropyltrimethoxysilane with ureidopropyltriethoxysilane. A showing by the Applicants of the non-equivalency of the two

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silanes would be needed to overcome the 103(a) rejection relied upon below. A direct comparison between the physical properties of the resulting coated films (which are prepared in an identical fashion in a manner which is satisfied by the instant claims) would be required. A showing that such coated films are non-equivalent can then be directly correlated as arising from any potential differences between ureidopropyltriethoxysilane and aminopropyltrimethoxysilane. The 103(a) rejection may be overcome by showing the improvement in the physical properties of the coated films prepared according to the instant invention and those prepared as taught in Nogami et al.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nogami et al. (US Pat. 5,800,926), in view of Hayashi et al. (US Pat. 6,800,330)

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The coating solutions of examples 3 and 4 of Nogami et al. and the coated films of example 6 and Table 1 satisfies all of the limitations of the instant claims with the exception that instead of the ureidotrialkoxysilane as required by the instant claims, Nogami et al. employs an aminopropyltrialkoxysilane (example 3).

In example 3, Nogami et al. employs 0.045 mol of TEOS [compound which satisfies formula (1) of the instant claims]; 0.0132 mol of tridecafluorooctyltrimethoxysilane [compound which satisfies formula (2) of the instant claims]; 0.0034 mol of aminopropyltrimethoxysilane, ethanol [which satisfies formula (4) of the instant claims] and oxalic acid. The ratio of compound (B) to compound (A) is calculated to be 0.29. The ratio of the aminopropyltrimethoxysilane to compound (A) is calculated to be 0.074. The ratio of ethanol (D) to the total amount of alkoxy groups is calculated to be 8.3 and the ratio of oxalic acid to the total amount of alkoxy groups is calculated to be 0.72. The coating solutions were heated according to that taught at 2:58-64, which satisfies the limitations of the instant claims. The resulting polysiloxane coating solution (L_3) was dried at 80 °C then heated to 100 °C, which satisfies the limitations of the instant claims. Example 4 of Nogami et al. teaches the addition of a silica sol to the coating fluid which satisfies the limitations of the instant claims.

As stated above, Nogami et al. does not explicitly teach the addition of an ureidoalkyltrialkoxysilane [formula (3) of instant claim 1]. However, Hayashi et al. teaches that aminopropyltrimethoxysilane and ureidopropyltrimethoxysilane are functional equivalents as silane coupling agents/adhesion promoters (14:66-15-25). Nogami et al. and Hayashi et al. are combinable because they are from the same field of endeavor, namely, polysiloxane films prepared via hydrolysis and condensation of alkoxysilane precursors. It is *prima facie* obvious to

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substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 340. See MPEP 2144.06. The express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532.

Taken together, Nogami et al. in view of Hayashi et al. collectively teaches a process for preparing a coating fluid according to instant claims 1-3; a process for forming a coating film according to instant claims 4-6 and 16; a coating film which satisfies the physical properties of instant claims 17-19; a process for preparing a coating film which satisfies the physical properties of instant claims 20-23; and a coating film which satisfies the physical properties of instant claims 24-26. While Nogami et al. in view of Hayashi et al. do not explicitly teach coated films which satisfy the physical properties of the instant claims, a chemical composition and its properties are inseparable.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT LOEWE whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-13021302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1796
5-Jan-09

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796